ERIC Document Resume	See Instruction Sheet	DATE OF RESUME	DATE RECEIVED

A. PUBLICATION DATA

1. ERIC NUMBER	2. ORIGINATOR CONTROL NO(S).	3. IDENTIFICATION NO.
ED001344	N.A.	N.A.

DO NOT WRITE IN SPACE BELOW

4. AUTHOR(S):
Bruno, Louis

5. TITLE OF DOCUMENT ABSTRACTED:
Keys to Identification of the Gifted Child

6. PUBLICATION TITLE:
N.A.

7. EDITOR(S):
N.A.

9. PUBLISHER OR SOURCE
Office of the State Supt. of Pub. Instruction, Olympia, Washington

10. VOL.	11. PAGES	12. MO./YR.	13. TOTAL PP.
N.A.	N.A.	1963	38

8. PLACE OF ORIGIN
ORG. Office of the State Supt. of Public Instruction
ST.
CITY Olympia, Wash.
TELE. EXT.
INST/LOC CODE

MICROFILM COPY AVAILABLE
YES ☒ NO ☐

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YES ☐ NO ☒

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TYPE OF REPORT
PROPOSAL ☐
IN-PROGRESS ☐
FINAL ☒
FOLLOW-UP ☐

OTHER ERIC REFERENCES:

ERIC SATELLITE CODE

B. INDEXING DATA

14. SUBJECT AREA

15. TYPE OF ENDEAVOR
report

16. INDEXING TERMS (6-12)

parent role	bibliography	achievement tests	
teacher role	standardized test	National Defense Education Act (NDEA)	
school records	intelligence test	testing programs	flexible atmosphere
	aptitude test	identification of the creative	

17. ABSTRACT (MAX. 250 WORDS)

Methods for identifying academically and creatively talented children and youth in our schools are presented. Included is the role of each of the following in the identification process: parent observations, teacher observations, permanent school records, and such standardized tests as intelligence, aptitude, and achievement tests. The National Defense Education Act offers funds that may be used to support testing programs in aptitude, achievement, and emotional and personality adjustment.

A few guidelines for identifying the creative include the child's lack of interest in small details, in the practical or the concrete, and his concern with meaning, implications and equivalents of things and ideas. The creative should be provided for with such things as flexible physical facilities, assurance, reductions of external evaluation, and flexibility in program and classroom.

A bibliography and computations are included.

ERIC No.

18. SOURCE OF ABSTRACT

C. FUNDING DATA

19. SUPPORTING ORGANIZATION

20. DIVISION OR DEPT.

21. CONTRACT NO.

PROJECT NO.

22. TOTAL COST OF PROJECT

23. DURATION OR PROJECT

U.S. Department of Health, Education, and Welfare
Office of Education

Dr. Baker TDI
1 RB

1963

KEYS to Identification of Gifted Children

ED001344

LOUIS BRUNO SUPERINTENDENT OF PUBLIC INSTRUCTION
OLYMPIA

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Keys To Identification of the Gifted Child

1963

LOUIS BRUNO
STATE SUPERINTENDENT OF PUBLIC INSTRUCTION
OLYMPIA, WASHINGTON

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LETTER OF TRANSMITTAL

The need for increased emphasis on the education of gifted children was recognized by the Washington State Legislature with the passage of the "Superior Capacity Students" bill during the 1961 legislative session.

We have prepared this publication in the recognition that identification of the abilities of all boys and girls is a first step in providing for their individual capacities.

The content has been gleaned from current literature and from common practices in the public schools of our state. It is hoped that this report may be of assistance to those who are involved in programs for the gifted.

Louis Bruno

State Superintendent
of Public Instruction

Prepared Under the Staff Supervision of
The State Office of Public Instruction

LEWIS BLOOM
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Assistant Superintendent for Curriculum and Instruction

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FOREWORD

A simple but critical request can be used to test the reality of any alleged program or provision for gifted children. The request "please show me your list of gifted children" is critical in that schools or school systems that fail to **identify** their gifted children as individuals can seldom be expected to **provide** for them as individuals. The name of each gifted child must be readily available to every professional staff member if an effective educational environment is to be developed. Not all gifted children are conforming achievers, not all will be in "honors classes." Some will be masked under a cloak of mediocrity, and some will live in environments where value systems do not encourage or support high academic or talent achievement. The first step in talent development is accurate, systematic, and continuous identification.

Research and practice provide useful insights for identifying the gifted; much remains to be discovered. This bulletin from the Office of the Washington State Superintendent of Public Instruction provides in a clear and comprehensible form some of the best and most useful thinking in the field. It makes no claim to comprehensiveness, and it provides no panaceas. No prescription will meet the needs of every school. For those who are willing to examine the suggestions carefully and are willing to adapt them to their local needs, this document should provide a most useful point of departure for the improvement or development of a dynamic program for identifying gifted and talented children and youth.

J. NED BRYAN
Specialist in Education of Gifted and Talented Children and Youth

U. S. Office of Education
Washington, D. C.

INTRODUCTION

Only the history of the ages to come will contain the answer to the real challenge caused by that feeble signal which was picked up from the first earth satellite on October 4, 1957. The real challenge is the creation of a world society where each person shall be happy and walk unafraid upon the earth.

Although many schools had already organized stepped-up offerings, including special classes for the high achievers with emphasis on advanced and accelerated contents, the American public's immediate response to the Russian scientific success was to insist upon doing something about our educational system to gear it to the challenge of space science. Proposals were many, but all were aimed at the attempt to recruit the abler youth into the areas of science and mathematics. Havighurst (25) said, "People are happiest when they use their abilities in ways which they enjoy and which their society finds valuable. A good society cultivates its members, and by their fruits society is made better. A good society gives its members opportunity to develop and use their abilities in ways which they find satisfying and which the society approves."

Although the concern for education of increased numbers of our talented students is not new, the Russian accomplishment has given real impetus to the effort to capitalize on our talented. This is the age of high demand for talent. "A free nation's search for talent is always a critical aspect of its national existence." (30)—Rockefeller Report.

The problem of individual difference is basically political. We in America stand for individual freedom—a goal which we have far to go to reach. If we are to reach our goal, we must provide an educational system which will challenge all boys and girls. One of the necessary steps in providing such a system is the early and continuous identification of the separate talents of those to be educated.

Programs for superior capacity students are but a part of the total school program. There are many kinds of talent. Some students have more than one kind of talent. Society tends to vary the importance of individual talents from generation to generation, but the rapidity of the changing demands of society and industry points up the necessity of emphasizing the development of all talents. From the experiences of many schools, special attention to the needs of the gifted students usually results in a better program for all students.

It is important for our free society to educate its gifted boys and girls, not merely because the more intensive education of them is necessary to society's survival in the age, but because of our tenets of philosophy of human rights and equality of opportunity. We hold that every person has the right of self-realization, of acquiring knowledge and reaching such capacities as his desires allow. Schools have a responsibility to help identify and develop the separate talents of each child.

In that the responsibility for quality of education rests with the local school district, it follows that the local district must establish its own procedures for the educating of gifted children and that the district must determine the extent to which it will aid in the development of the talents of each boy and girl. Suggestions germane to the establishment of procedures for educating gifted children may be contained in the following definitions:

> *Educating Gifted Children* (7)—"We have adopted a broad definition of giftedness to include a variety of useful and complex abilities and a substantial group of people, as many as 10% at the top of each ability."
> *Identifying and Educating Our Gifted Children* (17)—"The gifted child is one who needs more opportunities than normal classroom procedure or schedule can offer him to fully develop his potential."

Either of the above definitions allows for considerable latitude in classification of the gifted child. Many schools will want to be more specific before they begin the search for the gifted. Some may even make a preliminary search and then set standards to describe those identified. The important thing is to recognize that we have had, we do have, and we are now improving our instruments and methods for identifying gifted children. Recent changes in thinking on the part of educators and the public as to who are the gifted have led to extensive research and emphasis on the gifted in fields other than intellectual ability. Torrance probably phrased the attitude and challenge of those concerned with better instruments and identification of other talents when he said (36)—"We promise, however, to behave as responsible researchers and do the work necessary to work out some of the implications of our ideas and to produce manuals and testing materials which can be used ultimately by reasonably well-trained personnel."

Planning Your Identification

Regardless of claims which are sometimes made, we are not able to identify in childhood those individuals who will make remarkable contributions in adulthood. There are many unpredictable factors and many unpredictable people. The only sure way to locate valuable human resources of outstanding talent is to screen and follow up every child.

Those responsible for the identification of gifted children may want to develop a local statement of principles for their system. Others may want to use a prepared list of criteria, and some will want to adapt existing programs to their own use. In initiating a program of identification the following may be of value as guideline statements:

1. Identifying superior and talented students is the accepted responsibility of all administrators, counselors and teachers.
2. This responsibility should be specifically delegated to one individual.
3. The identification process should be initiated as early as possible in the child's school experience.
4. A systematic search is necessary. If the screening process is not carefully conducted, capable students may be overlooked.
5. The search must be continuous and provide for reappraisal of past findings on individual children.
6. Other abilities besides those measured by I.Q. should be considered, especially creative ability and special aptitudes.
7. Due care should be exercised in the selection of test instruments.
8. Non-intellectual factors, such as physical and emotional health, motivation, social characteristics and behavior patterns should be recognized during the screening process.
9. A personal record folder should be maintained for each child so that the recordings covering the child's total educational experience will be available for examination and evaluation. Some school districts have now adopted special marking of the folders of their identified gifted so that they may be readily identified as the child moves from grade to grade, school to school or district to district.
10. For easy comparison of student progress, testing may be done at the same time in each succeeding school year.
11. Flexibility should be maintained in the screening and identifying program, so as to assure testing of late enrollees, absentees and transfers. School officials should provide for retesting and must be willing to add students to the program who were not previously included.
12. Identification programs should be systematically and critically evaluated in terms of goals and outcomes.

Characteristics common to gifted children are true to them only as a group. While such children do exhibit some general characteristics, there will be many deviations from the expected pattern. Individuals will not necessarily conform to these generalizations. The potential of each child identified as probably gifted can be further analyzed by use of the general observable traits selected from numerous studies and listed below.

Physical Characteristics

1. Displays good general health
2. Is physically more mature than his age group
3. Is stronger than his age group
4. Is taller than average for his age
5. Demonstrates good physical coordination

Emotional Characteristics

1. Displays self-reliance
2. Shows good social adjustment
3. Displays superior mental health
4. Appears to have accelerated character development
5. Is quite critical of others and self
6. Demonstrates a feeling of boredom with routine things
7. Prefers older companions
8. Seeks adult approval before peer approval

Mental Characteristics

1. Exercises initiative
2. Shows evidence of the power to generalize
3. Makes logical associations
4. Displays the ability to follow complex directions
5. Demonstrates a marked degree of curiosity
6. Has deep and varied interest in many things
7. Has a relatively long attention span
8. Uses a vocabulary superior to others of his age
9. Displays originality in oral and written expression
10. Enjoys reading for informational purposes

Parent Observations

The parent is in an advantageous position to observe the attitudes, behavior and achievements of the pre-school child. Even though reliability may be lacking, results of value can be achieved if parents adopt an attitude of objectivity. Areas in which giftedness tends to exhibit itself at an early age include the ability to talk. Even the early ability to walk seems to have possible relationship to superior mental capacity. Parental recordings in "baby books" (as long as the child being considered is not present to be embarrassed) can be quite objective in regard to early vocabulary and sentence structure. The ability to say words before twelve months may indicate superiority. A twenty-five word statement spontaneously used at the age of eighteen months strengthens this observation of an early vocabulary and mental superiority.

There have been reports of children who taught themselves to read by the age of three years or less. Cutts and Moseley (6)

say, "Any child who, without being forced, learns to read before he is five is bright." Parents can be quite objective in their observations if they use scales for comparison. Cutts and Mosely (6) report, "Social adjustment is hard to estimate for parents. But if you have a trustworthy record, compared with the Vineland Social Maturity Scale, and if the child's social development has proceeded at a faster pace than that indicated on the scale, he is probably superior in intelligence."

A gifted child is perfectly normal in a home where the whole family has superior intelligence. Extremely gifted older children may overshadow gifted younger children of lesser intelligence. In fact, these highly gifted older family members may even cause the parent to consider that the less gifted younger children are only average or even retarded.

The present search for the gifted should not be confined to the homes of highly intelligent parents. As cited by Sumption and Luecking (34), "Though research indicates that gifted youngsters usually issue from gifted parents, it is possible that a gifted child will come from a home where he is the only member of the family who indicates a degree of superiority." In cases such as these, parental observations may be based upon the fact that the child is different, that he does not share the interests of the family, that he does not play with the youngsters of his own age group in the neighborhood, or that he always has some individual project on hand which the family does not understand. Ruth Strang (33) enlarges this premise when she suggests that the parents examine their own often unconscious attitudes toward their gifted children. "Some parents are anxious that the child be a credit to them and increase their prestige. They embarrass him by boasting about his achievements, and thereby alienate him from his friends. Some gifted children sense that they are not loved for themselves, and resent this, some even to the extent of failing in school. In extreme cases, parents have exploited a gifted child, forced him to practice long hours, exhibited him, and otherwise failed to consider his total development."

Strang (33) also says, "Some parents seem jealous of their gifted child. They can't take his superiority to them; it makes them feel inferior. In a few instances parents may actually feel hostile to the child, often for reasons which neither they nor he can understand. Other parents seem indifferent to their gifted children. These are usually parents who do not appreciate the importance of education and feel that, 'what was good enough for them is good enough for their children.' They do not realize that their child may be quite different from them. They do not expect enough from him and discourage his intellectual interest. Some parents restrict their child's natural eagerness to learn because they are afraid it will overtax his mind or make him 'high hat.'"

Children who are not understood by their parents or who are placed on exhibition or who are resented, normally fail to achieve to their identified ability level. Such cases, once identified, must receive proper special educational services if the child is to achieve to his identified capacity.

Teacher Observations

Teachers' observations and judgments of gifted children are usually more accurate than those of parents. Teachers can be less emotional about the child, and they use more objective measures. The basis for comparison of quantity and quality of achievement is ever present in a group. Teachers can note the child who finishes his work first, who works rapidly without finishing, or who seems to grasp ideas but does not adjust to routine. The teacher can note the individual who reads well and almost constantly, or brings books from other sources.

Teachers should not overlook the child who neglects his work for projects or activities more interesting to him. Often a teacher cannot measure the rapidity of completion of work by a child as a criterion for identifying superior ability, as the gifted child may avoid rapid completion of an assignment once he learns that it may lead to an extended assignment by the teacher. He may react by working more slowly or by adding innovations of his own to the assignment, asking unnecessary questions, recopying the completed assignment, assisting other students or rapidly finishing, then working on other subjects while pretending to work on the assignment.

The usefulness of teachers' judgments with respect to the students' abilities is, however, limited. Some teachers tend to overrate the intelligence of students who are neat, pretty, obedient, friendly or talkative. A conforming child may win his teacher's approval, while the child who is independent in his thoughts or actions or asks many questions may antagonize his teacher. Yet he is demonstrating originality and curiosity—recognized characteristics of high intelligence.

Cutts and Moseley said (6), "Bright children . . . are not all little angels. If they are bored or if they feel they are wasting time, they are more than likely to make trouble. They may have acquired bad work habits or be impatient with routine and fail to do their lesson. You may judge them on the basis of behavior or performance and never discover their true abilities."

Teachers sometimes err in their judgments by confusing achievement with intelligence. Teachers today are more likely than those of the past to make a distinction between capacity to achieve and actual achievement. This is due to increased professional training on the part of teachers, plus increased emphasis in education to distinguish between capacity and actual achievement.

With the present emphasis on subjective measurement, many teachers have turned to specific checklists furnished from their school office. These lengthy and easy-to-check lists are the number one device in placing teacher judgment as one of the most important items in the identification of the gifted. In regard to checklist rating, Guilford (14) says, "Checklist instruments are relatively new and would seem to be growing in favor. Their simplicity of administration is one of the strongest points. In terms of qualitative judgment they require the minimum discrimination on the

part of raters." Many schools have constructed their own checklist for teacher selection of talented students, while others selected prepared lists to aid in this judgment. Care should be taken that items in such a list have reliability and validity.

The two lists below are examples of these important checklists, and are a part of the identifying instruments considered by the Committee on Student Identification in the St. Paul, Minnesota Student Developmental Program.

Mary M. Pilch—Criteria for Identifying Outstanding Students (38)

How to Use the Rating Scale

. . . "using the specific criteria provided on these scales, teachers of grade 8 and their principals make subjective value judgments of their students. Form A, Criteria for Identifying Oustanding Students, suggests criteria which can be used to judge the student on the basis of general intelligence. Form B, Criteria for Identifying Students Who Reveal Potential Capacities in Science or Mathematics, or Both, suggests criteria which can be used to judge the student on the basis of potential capacities in science and/or mathematics.

Please follow this procedure when using the rating scale as supplementary data when considering your recommendations during initial screening.

Form A

1. **Read the eleven (11) criteria carefully.**
2. **Select from all your eighth grade students those you think may be rated very favorably on at least six (6) of the criteria.**
3. **List their names alphabetically, last name first.**
4. **For each student whose name you have listed, consider each characteristic as noted. If you feel that the student is outstanding in that characteristic when compared to the rest of the class, place the letter of the alphabet which identifies that characteristic in the second column, opposite his name. Do this for each student on an individual basis. To verify the number of characteristics you believe apply to that student, place the number (may be 6 to 11) in the column entitled "Total No. of Criteria."**
5. **A teacher may wish to add a personal comment or give additional characteristics about a student. Teachers are encouraged to do so in the fourth column.**

Criteria for Identifying Outstanding Students

School ..... **Teacher** .....

Date ..... **Grade** .....

A. Has a superior written and spoken vocabulary
B. Has ability to do independent study
C. Has a wide curiosity in most learning situations
D. Explores an interest further and retains information longer than most students
E. Reveals superior performance in problem-solving situations
F. Reveals originality and creativity
G. Is an extensive reader in many areas
H. Has unusual ability to draw inferences from a wide variety of reading material
I. Demonstrates good judgment in dealing with people and material

J. Has an awareness of the complex relationship in the social and physical world

K. Explores a great many interests and hobbies

Pupil's Name	Letters of the Characteristics Which Apply	Total No. of Criteria	Appraisal Comments

Form B

1. Copy the same names you have used in Form A
2. Keeping in mind that these characteristics should reveal potential capacities in science and/or mathematics and that these eleven (11) criteria are adapted to this objective, teachers will follow the same procedure for completing the second, third and fourth columns as was used in Form A. Each student must be considered individually. Each student must qualify on at least six (6) of the criteria. The total number must be within the range of 6 to 11. Appraisal comments are encouraged.

Form B

Criteria for Identifying Students Who Reveal Potential Capacities in Science or Mathematics or Both

School ..... Teacher .....

Date ..... Grade .....

A. Has an appreciation for the scientific method of study
B. Can see the relationship of fact and theories
C. Respects the value of accuracy
D. Can synthesize information and materials
E. Reads extensively and has an advanced scientific vocabulary
F. Can visualize abstract relationships
G. Has an inquiring mind
H. Sustains his interest and efforts in an activity to its conclusions
I. Has manual dexterity and coordination
J. Carries on original projects outside of school
K. Is eager to share with others unusual information he has gathered

Pupil's Name	Letters of the Characteristics Which Apply	Total No. of Criteria	Appraisal Comments

In that human error and human judgment both enter into parent and teacher judgment in the identification of talented youngsters, it is necessary to turn to more objective measurements. These

more objective methods do not normally replace subjective judgment, but are rather used to supplement it.

Fortunately, many other methods are available for the teachers' and counselors' use in the task of identification. Factors involved in more formal identification are sometimes classified into three categories, namely, school records, standard achievement tests and intelligence tests.

Permanent School Records

Systems of record keeping in the last one hundred years have progressed through the following stages: First, the ledger form, which listed only name, grade and promotion; second, a more advanced form which recorded a small amount of family history, date and place of birth, and school activities and honors. From this we advanced to the present period in which a permanent record folder is developed for each child.

Although the use of the permanent record folder is standard practice in the State of Washington, there is need in many school systems for immediate consideration with regard to the contents of the folder, its use, its transfer, or transfer of its information (in case of transfer of the child), and its storage so that it is readily accessible for use. In that identification and evaluation should be a continuous process, it is necessary that individual folders be stored in an area readily accessible to those professional personnel who use them.

Special attention should be given not only to continuous evaluation of the records in relation to the child, but also in relation to the actual value of the contents as media for the identification processes.

Children who transfer from grade to grade, school to school, or from district to district, have a right to be followed by their record folder or by the information it contains. Those responsible for the child in his new school normally feel immediate need for a history of his past performance and evaluation from former teachers so that the child's education may progress according to his ability and needs.

The permanent record folder items important to the gifted can be divided into several areas. One area is teachers' marks or recorded scores in specific subjects. It may not be the child whose record shows all A's who is superior. When teachers check the permanent record of a child to compare grades given by another teacher or to make a decision as to the child's ability, they should keep in mind that grades do not necessarily indicate a child's potential. Normally, when a child earns increasingly higher grades, this indicates a growing potential to be further observed. When teachers or counselors review past or present grades given a child, they must recognize that teachers who gave the grades may have a different idea as to the value of the given grades. Some teachers are rated as hard graders; hence it is difficult even for superior students to receive high grades in such classes.

Many grading systems in grades seven through twelve fall into one of three categories: (1) grading on a curve, (2) grading the child in relation to his estimated ability, and (3) establishing a definite standard of value for each grading symbol on a school system-wide basis. The use of the first two methods will not allow a person, other than the one who gave the grades, to use them as an aid in the identification of high achievers. The third system, with a defined standard for each grading symbol, lends itself to more accurate identification of high achievers. An accurate description of the grading method used should accompany the recording and transfer of any grades.

Many school systems have adopted a district-wide letter grading system for use in their junior and senior high schools with letters A, B, C, D, and F. Various numerical or descriptive values are assigned to each letter, with C being used to indicate normal achievement, and F as failing or unsatisfactory. Only a few school systems have attempted to establish a system of grading which leads to A and B for the high achievers, possibly B, C and D for the slightly lower or normal achievers, and D and F for the below normal. This grading system is sometimes used where school systems have "track" or "honors" programs, with those of the top "track" or honors usually being the ones to receive the A grades. Variations of this grading system may gain in popularity in Washington due to the release of bulletin No. 126-62 (Marks Earned in Honor Classes) by the Supervisor of Secondary Education of the Office of Superintendent of Public Instruction.

The cumulative records of each child should contain a wealth of information for the alert teacher or counselor as he attempts to evaluate and reappraise the potential of each individual child. Many items of importance besides test scores should be included in the permanent record folder, such as: the child's placement within the family, the number of brothers and sisters, the educational level of the parents, the success of other members of the family, one or more autobiographies, copies of educational planning as to interest and choice of subjects, personality traits, sociometric charts, records of leadership, achievements and activities, interest inventories, health records, aptitude tests, and other test results which go beyond the usual tests of academic aptitudes, intelligence, ability and school achievements in search of special talents.

Standardized Tests

One may raise the question, why test? Why should we spend the time and money to administer any type of test, whether it be a group I.Q., individual I.Q., achievement, aptitude, or any other type? Why should we not depend entirely on the school performance for our predicted identification? We know test scores and school marks together predict more accurately than either one separately, and that each serves a somewhat different purpose. In general, we can expect the greatest success from those children who rank high on both predictors, and the expectancy becomes less for those who score low on either one or both. It also follows that a high ranking

on either factor helps to identify a potential high achiever who would not be identified by the other. Standardized test scores also furnish methods of comparison of students with their peers, students from different schools, different teachers and different grading systems.

One should not believe that standardized tests are without limitation, as those tests available to date have little actual evidence that they measure original thinking, creativity or inventiveness. In mentioning specific limitations in regard to the I.Q. test, Getzels and Jackson (13) say, "For all practical purposes, the term 'gifted child' has become synonymous with the expression, 'child with a high I.Q.', thus binding us to other forms of excellence." At present, our standard tests give little help in discovering individuals who may pioneer untrodden intellectual territory. Thus, our identification of the talented in untrodden territory depends upon other measurements and personal judgment.

Nearly all testing and identification programs in the elementary schools use group I.Q. and achievement tests. The use of the individual I.Q. test is normally for special referral cases where it becomes the judgment of those responsible that an individual I.Q. test should be administered. This common practice of use of the I.Q. and achievement test by the elementary schools for identification and other purposes leads to one important factor of identification, that of making it a continuous process.

Literature and research imply that there is emphasis on testing at the junior and senior high level, but this does not lessen the importance of testing at the elementary level. Doppelt and Bennett (8) found that the junior high school years are a good time to administer a standardized testing program — "The growth of intellectual abilities, as reflected by standardized scores, has stabilized by this age-period to the extent that an eighth-grade test is likely to be nearly as effective as a twelfth-grade testing in predicting—let us say—college freshmen marks." Also, normally in the junior high years, students make long-range educational and vocational choices and select areas of concentration they hope will lead to satisfactory productivity. Henry Chaucey (25) stated, "Although the junior high school years offer both an excellent opportunity and a pressing need to marshal efforts at identification of intellectual ability, I do not mean to imply that such efforts should be confined to those grades. On the contrary, identification should be a continuous process. The formal program directed at such critical choice points as eighth and twelfth grades should, ideally, build upon previous activities and lead to future ones."

The Intelligence Test

Abraham (1) says, "Define the gifted child almost as you wish and you will find some authority to support your point of view."

"If you want to restrict your definition to I.Q. and set the bottom figure at 120, 130, 140 or above, you will have plenty of support . . . or suppose you want to leave I.Q. out entirely, you

would be on safe ground. A bulletin of the National Education Association defines giftedness as a high order of ability to handle ideas, to produce creatively and to demonstrate social leadership." Abraham also cites another expert who agrees with the NEA publication when he states, "Paul Witty also steers clear of I.Q. involvement with his reference to one whose performance in a potentially valuable line of human activity is consistently remarkable." Abraham notes that there are 113-plus attempts to define the gifted. After listing a number of these definitions, he concludes, "there is no such thing as an accurate composite of a gifted child."

The commonest measuring device used in the identification of gifted children is the standardized intelligence test. Sumption and Luecking (34) stated that it appeared on the agenda of every school's testing program, while DeHaan and Havighurst (7) found it used in most schools. The survey of 1960 in the State of Washington (42) found the I.Q. listed as an instrument of identification in the testing program of all reporting schools.

Mental abilities tests are administered to groups of children or on an individual basis. Common practice is to administer group tests to select groups of students, then to administer individual tests to those students whose group tests indicate possible inaccuracy. Group tests of intelligence confront those examined with tasks like those found in the individual intelligence scales. Both types of tests tend to minimize routine school learning and emphasize mental alertness by presenting problems which demand reasoning, generalization and manipulation of ideas. But there is a difference, too, between the two sorts of tests. In individual intelligence scales, questions are presented one at a time without time limit, or generous time limit is allowed. In group intelligence tests questions are printed in booklets, times are fixed and the answers are limited to the options provided. The group test is more dependent on reading than on individual tests, it is less flexible in response, and is often disturbing to children who are easily flustered by a time limit.

The time required for administering an individual test is normally near one hour, plus the necessary time required to write up the findings. Under no conditions should the individual intelligence examination be administered by a novice, and interpretation requires even more technical skill. The specific advantage of the individual test is that it is more accurate, can be administered to non-readers, and can be flexible to the needs of the individual examined.

In referring to the predictive value of the intelligence test, DeHaan and Havighurst (7) wrote, "A number of cautions should be observed in the use of tests and observational devices in the identification and selection of students with gifts. Such caution will prevent dangerous over-simplification of the very complex problem of identifying talent. They will also prevent serious mistakes resulting from misunderstanding or misuse of testing devices." Drews (31) agrees with the concept of cautious approach when she states, "Despite the caution with which I.Q.'s must be inter-

preted and the changes which occur in youth and maturity, scores do have predictive value. A student with high tested intelligence nearly always does better work in college than a student with average ability. He is also more likely to be a success as an adult."

The work of Terman and other early psychologists utilized the I.Q. as the sole measure of intelligence. More recent studies question such usage, and point out with increasing clarity the very complex multi-dimensional nature of mental abilities. The work of Thurstone indicated that intelligence can be described more adequately as a group of independent factors than as a general ability expressed in a single I.Q. score.

Recent research in the isolation and discovery of numerous factors of intelligence has been carried on by J. P. Guilford. In 1956 (16) Guilford announced that he had identified forty separate factors of intellect, and that he had hopes of increasing the number to as many as 120 distinct factors. In 1958 the known number was increased to near 50. In presenting this report Guilford said (16), "With about 50 intellectual factors already known, we may say that there are at least 50 ways of being intelligent. The structure of intelligence is a theoretical model that predicts as many as 120 distinct abilities, if every cell of the model contains a factor. Already we know that two cells contain two or more factors each, and there probably are actually other cells of this type."

A committee of experts agreed with this statement (23) when they reported, "A common error in identification is based on the assumption that mental organization is a simple unitary thing and that I.Q. or some other single measure is as nearly perfect an index of ability as we can obtain. There is ample evidence that the mental organization is highly complex and that single measure tests are apt to conceal important differences." DeHaan and Havighurst (7) also pointed this out by stating, "With the great complexity evident in the structure of mental ability, it is clear that a single test given for a period of only one hour or so will provide a very small sample of the child's abilities as a whole. A teacher should take this into consideration and be cautious about using only one device to measure talent."

There seems to be common agreement that the I.Q. test is the best and most accepted instrument of measuring intellectual abilities. There is also common agreement that there is danger in attempting to identify the many abilities by a single test. This latter statement fails to mention that there is doubt that I.Q. is static. L. W. Sontag (26) reports. "Where we have been studying child growth and development for many years, we have found that the I.Q. of the children we studied changed more dramatically between the ages of six and twelve. Taking alternate forms of the same test at regular intervals, a fourth of the children tested increased their scores by eighteen to fifty-seven I.Q. points from age two and one-half to age twelve. We think that the increase happened mostly because these children came to rely on themselves more as they got more satisfaction from being able to master the problems they came across."

What does this mean in identification? It means that we should consider the group and individual I.Q. tests as important instruments in identification of intellectual abilities but that we should not use them as sole determiners. The I.Q. score gives us a general idea of how intelligent the child is with respect to a limited number of factors of intelligence at the time the test was administered, but it does not tell the whole story.

Aptitude Tests

Another type of standardized instrument sometimes used in searching for talent is the aptitude test. An aptitude is defined as a natural tendency or an acquired inclination in some specific direction. General aptitude tests have heretofore been used almost exclusively at the secondary school level in connection with guidance programs. For a student who is intellectually superior, the results of aptitude tests tend to indicate that he could be successful in any of several areas.

The main difference between the ence test and the aptitude test is that intelligence tests signd for any person, regardless of previous or prospective ation, while aptitude tests are designed to test specific aptitudes considered essential for a certain successful performance. Warren (39) defines aptitude as "a certain condition or set of characteristics regarded as symptomatic of an individual's ability to acquire with training (usually specified) knowledges, skills or sets of responses such as the ability to speak languages, to produce music, etc." Many test publishing companies have produced tests for assessing artistic, clerical, mechanical, musical, physical, creative writing, dance, leadership or other aptitudes. Very limited use of such instruments may result from the common belief that they do not have high reliability, especially in identifying the highly talented.

Witty (45) cautions that, "The value of these tests depends upon the background and training of those who interpret them." The tests seem to have some reliability in sorting out the children who do not have special abilities. Tests of this type, however, are gaining in popularity as school systems not only seek special talent and abilities, but also to provide special class conditions so that potential abilities can develop. Although satisfactory identification of children who are highly gifted in special abilities cannot as yet be fully achieved, teachers and counselors should not fail to do what they can with available means. Recent trends both in test construction and research indicate the eventual production of better measuring devices.

Achievement Tests

The extent of the use of the standard achievement test in the identification of high abilities warrants individual treatment of this instrument. In checking the child's achievement level and diagnosing areas of strength and weakness, the standard achievement test offers more reliability than teacher-made tests. While achievement tests predict with considerable accuracy they do not

enjoy the forecast range attributed to the intelligence tests. However, Freehill says (10), "For predicting grades at the next level, the achievement scores are superior to any other measuring device."

In his 1961 publication, Fliegler states (9), "Achievement tests are rather commonly used." They provide a measure of past accomplishments, and from this means give reasonable expectations for future performance. Sumption and Luecking (34) enlarge this in saying, "Scores derived from achievement tests indicate a youngster's performance level in various school subjects. They show not what he is capable of achieving but what he has actually accomplished in a specific time. These scores can then be compared with what a youngster of high intellectual ability is expected to be achieving, and parents and teachers can plan ways of helping individual children on the basis of this information."

Batteries of achievement tests are available in English, science, mathematics, social studies, foreign language and reading. Reading achievement is of particular importance in selecting superior and talented students since reading is a skill which is necessary throughout one's academic career. National norms make these tests useful for all students. In the case of the gifted, the tests identify children who are performing in advance of these norms.

Probably the greatest single improvement has resulted from the increased emphasis on guidance and counseling, thus furnishing additional qualified personnel to interpret instruments of identification.

National Defense Education Act

Additional financial aid to local school districts is now available through the National Defense Education Act under Title V-A. The Title V-A testing program is confined to the secondary level, but not to extended secondary. The funds may be used to support testing programs in scholastic aptitude, achievement or multifactor tests dealing with both. They may not be used for testing programs dealing with emotional maladjustment, social adjustment or personality adjustment.

For the academic year 1960-61, the Office of the Superintendent of Public Instruction, State of Washington, authorized the expenditure of $56,166.88 for testing under the provision of the NDEA. Within the authorized expenditure the Federal Government matches the money spent by the local school district. Currently, Washington school districts are authorized to spend up to thirty cents per enrolled high school student for acceptable tests.

The testing provision of the NDEA has been very helpful in allowing individual school districts to proceed with identification of all children at the secondary level. This emphasis at the secondary level has projected downward into the elementary grades, suggesting that a good program at any level tends to produce a better program at other levels. Paul F. Brandwein (2) strengthens this statement when he said, "There has been a clear commitment to the improvement of education for all our students because one becomes conscious of the problems of all students when a search is made for a specific group."

Creativity

Although it is known that some schools seek to identify creativity, the extent and success of the search remains unknown. All of us have some idea about the meaning of creativity. At present, subjective judgment may be the most accurate predictor of this illusive human factor.

Wilson (27) said, "The plain truth is that we know very little about characteristics of children who are apt to become creative adults, and very little about the educational or other experiences that tend to produce those characteristics."

Several special projects related to creativity have attracted noteworthy attention, namely; the work of the California Institute of Personality Assessments and Research, directed by Donald W. MacKinnon; "Creativity and Intelligence," a University of Chicago study, directed by Jacob Getzels and Philip Jackson; the University of Utah study, directed by Calvin W. Taylor; and the Minnesota Study of Creative Thinking, directed by E. Paul Torrance. These projects and other studies are giving some answers and direction to kinds of creativity, personality types of creative people, creative processes, creative situations, the role of evaluation in developing creative thinking, personality development of the highly creative child and peer pressure against the highly creative.

Some findings of MacKinnon (21) may aid those who attempt to identify creativity. "There are three kinds of creativity. In the first of these, the creative is clearly an expression of the inner-status of the creator. Composers, expressionist painters, sculptors, and of course, creative writers fall in this category.

"In the second form of creativity, the creator acts largely to meet externally defined needs and goals. He produces a novel and appropriate product, but adds little of himself to the results. Experimental physicists, engineers, inventors and research scientists are representative of this category.

"The third form of creativity cuts across the other two in that the product is both an expression of the creator, and thus a very personal product—and at the same time a meeting of the demands of some external problem. Architects are perhaps the best example of this; others are certain kinds of writers, representational painters and musical performers."

In a 1958 publication Getzels and Jackson (11) presented their findings based on a study of a specific group of 449 individuals from a midwestern secondary school.

Using five available measures, adapted from Guilford and Cattell, and standard I.Q. tests to identify creativity, they selected the following for study:

> "The High Creativity Group. These were subjects in the top 20% in creativity when compared with like-sexed age peers, but not in the top 20% in I.Q. Twenty-four individuals were in this group.
>
> "The High Intelligence Group. These were subjects in the top 20% in I.Q. when compared with like-sexed age peers, but not in the top 20% in creativity. Twenty-eight individuals were in this group."

Thus, if the I.Q. test is used to select top creative talent, about 70% of the persons who have the highest 20% of the scores on the creative test battery will be missed. Or, stated otherwise, more cases with high creativity scores are missed than are identified by using an I.Q. test to locate creative talent. It should be noted that the above research is related to the upper levels of I.Q. and creative ability and the conclusions may not be true for ranges below this level. Getzels and Jackson, in a later study (12) found that the academic performance of the two groups (the High Creative Group and the High I.Q.) was approximately equal, even though the average I.Q. of the two groups varied by 23 points. The typical self-ideal of the creative child showed a slight negative correlation with his concept of his teachers' ideals; the self-ideal of the high I.Q. pupil was one which he believed his teacher would approve.

Taylor (35), substantiating the Getzels-Jackson studies, states, "In our Utah Conference reports on creativity there have been several indications that creativity scores and I.Q. are essentially unrelated, or at least are lowly related." Taylor reports that most of the emphasis on creative characteristics has been at the adult level, and that the challenge is now to redesign the known creative adult characteristics so that they can be used with children. In working with Holland, Dr. Taylor tentatively rates biographical items and past performance as probably the most efficient predictors of creativity. As for special aptitude tests designed to measure creative ability, Holland and Taylor regarded their validity as "still incomplete and unclear."

Torrance (36) reports a series of experiments mostly dealing with children in grades two through six. He announced nearly the same results as Getzels and Jackson, both as to personality, attitude and academic achievement. He reported a low correlation (about +.30) between creativity and intelligence, while with a specific gifted group this correlation was +.03. Torrance mentions that the highly creative child is one who is willing to move far ahead of peer thinking and activity; that he enjoys hard tasks and does not seem to be greatly bothered by failure or disappointment from which adults often try to protect children. He listed some of the adaptive characteristics of the creative as "indomitable persistence, compliance, counteraggressiveness, apparent ignoring of criticism, clowning, silence and apathy or preoccupation, inconsistent performance, solitary activity and playing around." In the classroom the creative are characterized by teachers and peers as being able to express wild or silly ideas, by productivity which is off the beaten track, by humor, quick responses and playfulness. They are less concerned than other children with conventional standards of success.

Martha Burroughs (3) quotes from several authorities:

> **"J. L. Holland (18), studying National Merit Scholarship Contestants, concludes that in a group of students chosen for scholastic aptitude, creative performance is unrelated either to that aptitude, or to scholastic achievement as measured by grades. 'High school grades,' says**

Holland, 'seem to be a function of citizenship, popularity and perseverance, and grade-getting involves different motivation from creative performance.' Students distinguished by the latter possess a conscious concern with high accomplishments, independence, originality and openness to experience. They also possess parents who were more permissive and supportive than were parents of the noncreative. Holland has developed a creative activities scale in science and a similar scale in art. Points are earned by such activities as having a scientific paper published in a scientific journal, winning an award in a scientific talent search, winning a literary award for creative writing, and receiving the highest award in a state music contest. Gough's Differential Reaction Schedule, a 1957 test designed to assess various components of originality, correlates positively with Holland's scales.

"In the absence of criteria known to be valid, the major experiments with children and adolescents are using creativity-test scores as criteria. Taylor, Holland, Torrance, Getzel, Jackson, Guilford and others have been and are pioneering in this area. They separately agree that this is a first useful step, since their developed instrument usually provides a reliable measurement whose validity can be tested by a longitudinal study.

"Getzels and Jackson are reported (12) to have scored their subjects on Word Association, Use for Things, Hidden Shapes, Fables and Make-up Problems, and written responses to stimulus pictures. Creative responses were characterized by humor, novel situations and unexpected endings.

"Guilford and his associates have constructed tests for each trait which they consider characteristic of the creative person. For example, tests of originality include giving possible consequences of improbable events (scored for uncommonness of response) making remote associations, and creating titles to match story plots.

"Torrance (37) has developed a battery of tests for elementary school children. In one, 'How Good Is Your Imagination?' the child is given toys which he is permitted to manipulate. He is asked to think of ideas for improving each toy so that it will be 'more fun to play with' and is scored on several aspects of ability. Flexibility, for example, is assessed by analyzing his responses in terms of the number of different approaches used in modifying the toy.

"In the 'Ask and Guess' test the child is asked to think of all the questions he would like to ask in order to understand what is happening in a given picture, to make as many guesses as possible about what caused the depicted event, and to guess all possible consequences of the depicted action."

Identifying the Creative

Obviously, it would be to our advantage if we could identify creative talent at a very early age. However, such an identification presents many unsolved problems. It is true that early in life some creative individuals show skills necessary to their ultimate careers. Others may delay from 15 to 30 years before the high level creative process occurs within them. Still others may have to wait a generation or two before society recognizes their creative product. Another group is reluctant to allow their creative selves to function because they have secured responsible uncreative positions within the social or business structure of their society, and they prefer to remain in their acceptable role.

There is some general agreement about the characteristics of the creative. Normally they are not interested in small details, in the practical or the concrete, but are concerned with meaning,

implications and equivalents of things and ideas. Creative people seem to have a positive preference for complexity—even for what appears as disorder. They excel in divergent thinking and are not bound to what is, but rather to what could be. The fact that they are not conformists does not make them emotionally unstable persons. The truly creative person is simply independent. MacKinnon (21) says, "Creative individuals are not well-rounded, they have sharp edges." Taylor (35), showing our need to identify the creative, points out that, "We believe until shown otherwise, that quite different psychological processes are involved when we learn existing knowledge and systems than when we produce new ideas, new knowledge and new systems.

"People are probably being far better prepared to perpetuate the past than to take new steps in the future that we might improve the past." He goes on to say, "We need to identify and develop people who can learn the past without taking it seriously. In other words, maybe our task is to produce more minds that are tomorrow minds than yesterday minds."

Providing for the Creative

Education and society face an equally or possibly more difficult task than the identification of the gifted, that being the identification and development of the creative individual. Increased knowledge about the creative process will make the task less formidable. Its importance demands brief digression from the subject of identification. One of the best methods by which schools can nurture creative talent is to de-emphasize group participation with its demands for conformity. There must be more opportunity for the creatively able student to work out his own interest.

Special attention must be given to factors such as physical facilities, educational activities and environmental surroundings.

Somewhere within the following list one may find some items to inspire and develop the identified creativity of each individual.

1. Flexible physical facilities
2. Acceptance of the individual, his actions, his production and and his thoughts
3. Assurance that he is loved
4. Knowledge that success is desired for him
5. Allowance for failure, waste, erorr and deviation
6. Flexibility of schedule and assignment
7. Elimination of date-line promptness
8. Reduction of external evaluation
9. A visible premium for unusual production
10. Understanding and acceptance of the new

11. Opportunity for self expression and learning
12. Exercises geared to produce divergent thinking and production
13. A democratic classroom atmosphere
14. Competition for producing the unusual
15. Allowance for some fantasy to function
16. Making learning and doing exciting
17. Permission for one thing to lead to another—even to wild ideas
18. Provision for some laughing freedom

In a February, 1962, presentation (AASA—Atlantic City, New Jersey) on Creativity, Paul Witty stressed that creative administrators and teachers produce more creative children. He suggested that possibly most individuals have creative ability which could be of value to society if schools accepted the responsibility for identification and development of such talents.

Selection of Gifted

If the faculty members of a school have established a minimum score which a child must make before he can enter into a special program for gifted students, they face a problem of deciding how to judge the borderline scores. If the minimum has been set at 130, what about the child with a score of 129? (If the decision is made from the central office it will be less difficult, as the standard must be adhered to just as the deadline date of chronological age for entrance into school is followed.) Most teachers and counselors who work directly with children are not convinced that the problem can be solved in a simple cut-off level. Several methods of identifying the gifted are essential, and no single measurement or standard should be regarded as the final answer.

Possibly the established policy used in the Portland, Oregon, Public Schools in regard to final selection of the gifted, best portrays the latest thinking on this subject. In answer to this question, (43)—"Frequently, individuals who were not informed concerning criteria used in selection ask what I.Q. a student must have to be admitted to the special class or seminar." The answer was that many items had to be weighed, including special talents, drive, temperment, personality, enjoyment of learning and other intangible which were included in teacher recommendations.

In another Portland publication, Williams (44) states, "No arbitrary cut-off point on any criteria for selection can wisely be established. Subjective judgment is involved, and many cases must be considered on their own merit. There will be errors."

Portland has adopted a printed guide to take care of these errors. They consider that their errors will be from identifying and placing

a student who does not fit into their program for the gifted, or in omitting a student from the program. Their printed instructions are as follows (44):

"I. Should a student whose work is not up to expected standards be kept in class? Special circumstances determine the answer.

"(1) Does permitting the student to remain do him an injustice in forcing him to compete unsuccessfully for status and for grades?

"(2) Does his presence in the class decrease the value of the class to other members? Student comments on the follow-up questionnaire sent to graduates of the class of 1954 who had been in the special sections indicate that they believe membership should be limited to those who contribute constructively to class experience.

"(3) Is he taking a place which should be filled by a more deserving student? Some of the schools have permitted misplaced students to remain in a special section if the answer to these three questions is negative.

"(4) If for the good of the program such a student's record should not indicate membership in a special section, he could be given only regular credit even though remaining in the special class. The student and his parents should, of course, understand this intention.

"II. Should a student who belongs in the class but was not included be admitted later in the year?

"Several students have been programed into special sections of social studies and English at various times during the year. It would be more difficult in mathematics, but special circumstances might make it possible.

"This program needs to be flexible to adjust to special situations as they arise."

SUMMARY

The past decade has seen the renaissance of interest in education of academically talented students and a search for better identification in this area. Due to better articulation, acceptance and public demands, there has been little apathy or lag in putting newly devised identification factors into practice. The next decade, with its increased responsibilities and challenges for education, thus, starts with distinct advantages over the preceding one.

In the final analysis, the definition of giftedness and the extent of the program rest with the individual school district or school in our state. The method of selection will vary from district to district. The advice of the authorities cited in this publication plus research findings call for broad use of all acceptable instruments, tests, devices and judgments in the identification of gifted and talented youngsters. Judgment has to serve a two-fold function; the first is the necessary teacher judgment as an identification instrument, while the second is the necessary counselor's or administrator's judgment, based upon tests, school records and teachers' recommendations as these people make identification decisions.

It is impractical to predict the direction that identification research and programs for the gifted will take, but we can predict that the pace will quicken and accelerate. The direction of expansion lies in creativity, expanding definitions, nonintellectual factors of intelligence, programing, guidance, teaching, and administrative responsibilities for keeping abreast of the best that is offered. Optimum use of the best that we have plus dedication to the development of better instruments and programs certainly lead to education of each boy and girl to the maximum of his and her individual capacity. This should result in a society which will enjoy freedom and walk unafraid upon our earth.

APPENDIX

Steps In Local Program Development

Programing for the gifted is a matter of extreme importance to which millions of words and thousands of volumes have been directed in the last ten years. A six-step approach (41) furnishes guides for such programing.

1. Examination of the purpose of the school
2. Appraisal of present practices using these purposes
3. Formulation of criteria for judging progress
4. Definition of gifted groups and survey of population involved
5. Establishment of program
6. Reappraisal of practices after the program has been in effect for some time.

Superior Capacity Students

Washington State Law (40), Chapter 26, Extra Session, 1961, provided that $150,000 shall be available only for research in public schools for which a detailed report on projects and expenditures shall be submitted to the Legislature, 1963: Provided that $50,000 shall be available for use in accordance with Chapter 116, Laws of 1961.

AN ACT Relating to education for students of superior capacity; and adding a new chapter to Title 28 RCW.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

Section 1. There is added to Title 28 RCW a new chapter to read as set forth in Sections 2, 3 and 4 of this act.

NEW SECTION. Sec. 2. There is established in the office of the state superintendent of public instruction a division of special education for students of superior capacity. Such students are those who consistently show remarkable performance in academic pursuits or demonstrate exceptional ability.

NEW SECTION. Sec. 3. The state superintendent of public instruction, shall, within the scope of policies and regulations adopted by the state board of education, administer a program to improve the education of students of superior capacity; conducting, coordinating and aiding in research (including pilot programs), disseminating information to local school districts and allocating supplementary funds for excess costs when appropriated for this purpose by the legislature.

NEW SECTION. Sec. 4. Local school districts, either separately or jointly may:

1. Establish and operate special, seminar or augmented programs of education for superior students; and

2. Employ and pay special instructors; and

3. Establish and operate in conjunction with any institution of higher learning joint programs of education for superior students.

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* Permission granted to quote.

IDENTIFICATION OF THE GIFTED CHILD IN INDIVIDUAL SCHOOL DISTRICTS STATE OF WASHINGTON 1962

TABULATED RESULTS OF THE IDENTIFICATION OF THE GIFTED CHILD SURVEY

Four hundred seventeen questionnaires were mailed to all operating school districts in the State of Washington in January, 1962. The tabulated results are from 213 local school districts. These districts, however, include most of the children in the state.

In some cases individual schools failed to respond to certain items; therefore all tabulations will not total the 213 general responses. This procedure does not invalidate the returns.

The following format will be used in recording the returns:

The original question will be listed above the graphed results.

A brief statement of explanation will follow.

LOUIS BRUNO

STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

OLYMPIA, WASHINGTON

Question No. 1. Do you have a regular plan for identifying the gifted? (yes) (no) If not, please complete items 12 and 13.

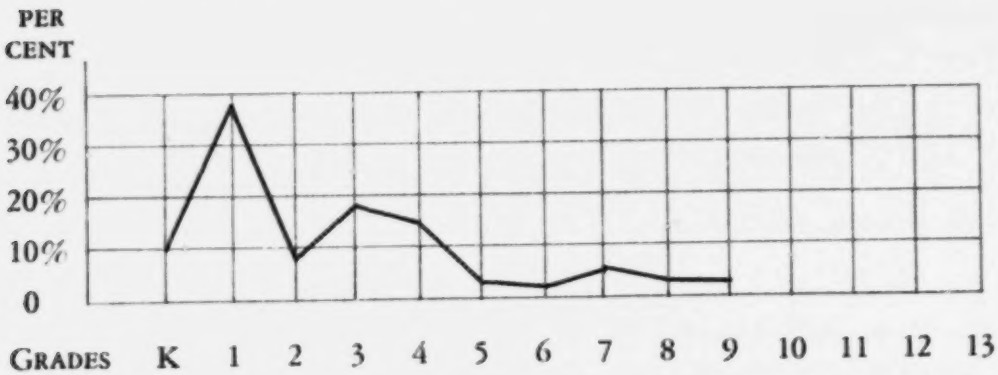
Yes 47%

No 41%

No response 12%

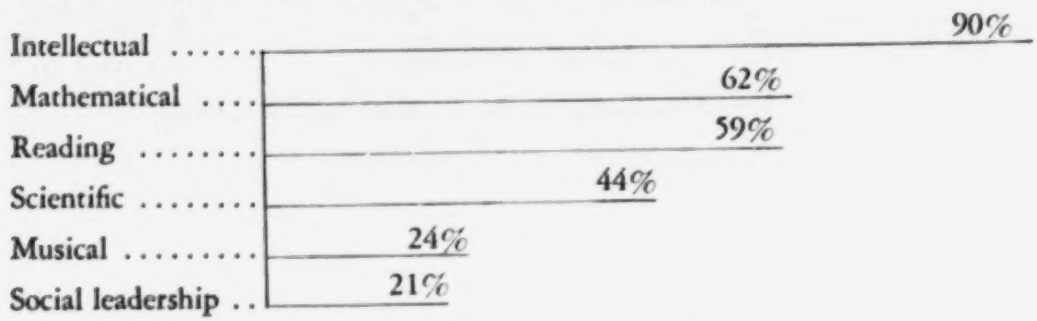
The fact that many answered (no) or made no response, and then proceeded to answer questions 2 to 12, might imply that many districts identify their gifted students but do not consider that they have a regular program. Two hundred thirteen local school districts of the State of Washington answered the above question in January, 1962.

Question No. 2. Please circle the grade level of the first identification attempted.



One hundred twenty eight local school districts, State of Washington, January, 1962, answered this question. The tabulated results show that early identification is a common practice, with all first identification being completed by grade nine, and over 75% of the first attempted identification completed at the end of grade three.

Question No. 3. Please circle the abilities which you attempt to identify.



Creative writing ..	20%
Physical	18%
Foreign language..	17%
Art	16%
Mechanical	13%
Dramatics	11%
Crafts	6%
All others.....	19%

The above tabulated results came from 131 responding local school districts in the State of Washington, January, 1962. The thirteen listed abilities were checked eight or more times. The "all others" contained twelve separate abilities with none being mentioned more than three times. The thirteen listed abilities follow a pattern common to those sought in other states. The frequency of the identification of reading is much higher than it was in the 1960 survey made in the State of Washington. In a like manner, physical education moved up in frequency. This latter may be due to national emphasis on physical fitness.

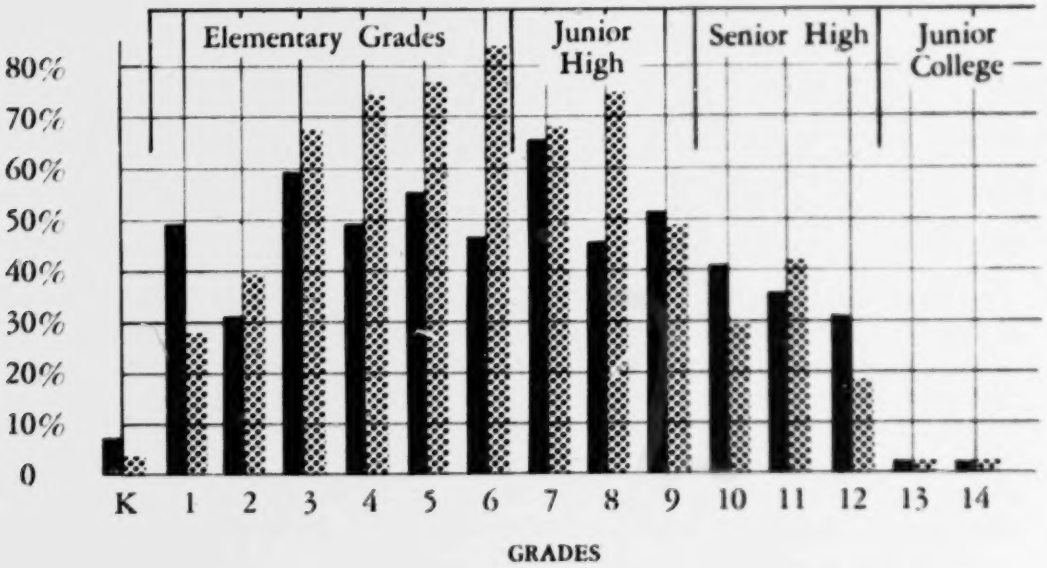
Question No. 4. Please circle the criteria used.

Intelligence tests	93%
Teacher opinion	86%
Achievement tests	86%
School grades	64%
All others	23%

The results follow the now common practice of considering the I.Q. test as the number one instrument of identification, a position it has held since the work and research of Terman. The tie vote between achievement tests and teacher opinion indicates the importance placed on judgment in the final selection and placement of children. This judgment is especially needed in the creative field where objective measurement is lacking. One hundred twenty four local school districts in the State of Washington answered this question, January, 1962.

Question No. 5. Please circle all levels at which general intelligence or scholastic aptitude tests are given. (Shown by grade in solid color on the graph)

Question No. 7. Please circle all levels at which standard achievement tests are given. (Shown by grade in dotted area on the graph below)



The information sought in the above questions has an overlapping relationship which allows common treatment of the results. Both graphs show two very important factors, that identification is early and continuous. There seems to be some concentration of intelligence and aptitude tests in grades one, three, five, seven and nine. The use of the standard achievement test increases every year through grade six. The years of the most use at the upper grades are in grades eight and eleven. In districts with a junior-senior high organization this would indicate that these tests are used after one full year of instruction at each level to compare progress to national norms, to diagnose the students' and the programs' weaknesses and for final identification of special abilities for the last year of programing at each level. In the 8-4 plan of organization this concentration at the eighth grade may also be to evaluate the total elementary program. One hundred fifty local school districts in the State of Washington responded to each of the above questions in January, 1962.

Question No. 6. If general intelligence or scholastic aptitude tests are used for identification, do you use a definite cut-off score? If so, for which abilities and what national percentile does this cut-off represent?

No	72%
Yes	28%

Question No. 8. For any ability you are identifying, do you use a definite cut-off score? If so, for which type of achievement and what national percentile do these cut-offs represent?

No	72%
Yes	28%

Again, the overlapping relations in the questions in items 6 and 8, and the answers to the two questions are identical. Within the past few years there has been a trend away from specific cut-off points as recommended by Terman's studies. Present recognition of the need to develop all talents, and the value of creativity, drive, motivation and other intangibles have caused elimination of definite cut-off points in favor of weighing many factors. In question number six nearly all mentioned cut-offs were I.Q. scores at 120 or above with a 130 score being mentioned most frequently by those who used cut-off scores. In the case of question 8, nearly all cut-off scores listed were either for qualification to take algebra I or a national percentile, near 90, to qualify for admittance to honor classes. Ninety nine local school districts in the State of Washington answered this question in January, 1962.

Question No. 9. Following identification, do you have a method or device for keeping track of the student as he moves from grade to grade, from school to school, from district to district?

Yes	82%
No	18%

One hundred eighteen local districts of the State of Washington answered this question in January, 1962; 98 judged that their present method was adequate. Many added a note that their records were adequate from grade to grade but needed improvement in the school to school and district to district transfers.

Question No. 9-a. If you do not have such a means of communication, do you feel that one should be established? What would you recommend?

Yes	29
No	8

Even though only 29 districts checked that there was a need for improvement on the above question, 35 actually offered written suggestions and recommendations which would lead to some standardization of cumulative records. A few describe their present methods used for immediate recognition of the folders of those children identified for local gifted programs. One district used a different colored outside jacket for the records of those identified. Thus, as soon as the child is identified, all records are transferred to this new colored jacket and replaced in the files. Another district places a special colored "pressure sensitive" tape on the folder of those identified. In case of necessity this can be removed without damage to the folder. A third method was to provide the identified child with a different colored permanent record card. This latter method involved the necessity of transferring the child's present record from the old card to a new one.